REMARKS/ARGUMENTS

This Request for Reconsideration is responsive to the Office Action mailed on September 14, 2004. A Petition for a two month extension of time is attached.

Claims 39-62 are pending and subject to examination on the merits.

On February 9, 2005, an interview occurred between the Examiner and the undersigned. Applicants' representative thanks the Examiner for his careful consideration of the arguments made during the interview.

I. 35 USC § 102

Claims 39-45, 48, 50-56, 59, 60, and 62 are rejected as being anticipated by Karger et al. (U.S. Patent Publication No. 2003/0034450). This rejection is traversed.

First, Karger et al. is not prior art to the present application. The present application claims priority to U.S. provisional application no. 60/249,835, filed on November 16, 2000 and therefore has an effective filing date of November 16, 2000. Karger et al., on the other hand, has an effective filing date of April 25, 2002, and it therefore does not have an effective reference date that is before Applicants' effective filing date. Karger et al. does mention U.S. provisional application no. 60/047,489, filed on May 23, 1997. However, the contents of that provisional application have not been presented to Applicants and as the Examiner is aware, the disclosure in the provisional application may be different than the disclosure in Karger et al.'s published patent application.

Second, even assuming *arguendo* that Karger et al. is prior art, Karger et al. fails to anticipate claims 39-45, 48, 50-56, 59, 60, and 62. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Here, Karger et al. fails to teach or suggest a number of limitations in independent claims 39, 50, and 60. For example, Karger et al. fails to teach or suggest a method for analyzing mass spectra, the method comprising, *inter alia*, "(b) forming at

least one signal cluster by clustering signals with similar time-of-flights, mass-to-charge ratios, or values derived from time-of-flights or mass-to-charge ratios" as recited in independent claim 39. Independent claims 50 and 60 have a similar limitation. To meet the limitation, the Examiner relies on paragraph [0033] of Karger et al. Paragraph [0033] states:

> [0033] As shown in FIG. 1A, the two essential elements of a TOF mass spectrometer are the source chamber 5, within which is an acceleration (extraction) region 10, and the flight region 20. The electric field in the acceleration region is given by the voltage difference between the repeller 12 and the acceleration plate 14. A second acceleration plate 16 and additional ion optics may also be used. In a conventional instrument, ions formed at the probe tip 30 by MALDI are extracted towards the acceleration plate. Because of differences in their masses, different ions are accelerated to different velocities during their stay in the acceleration region. Thus, light ions move across the field-free (flight) region in a shorter time than do heavy ones. An ion signal from the detector is recorded as a function of time and can be transformed to a function of ion mass-to-charge ratio (mass spectrum). The entire spectrum typically may be recorded in less than 100 μs. Analysis of small molecules is even faster. Alternatively, ions may be created by simple laser desorption/ionization; i.e., no matrix has to be added.

Clearly, this passage and other passages from Karger et al. fail to teach or suggest a method for analyzing mass spectra, where the method comprises detecting signals including signal intensities in a plurality of spectra derived, for example, from a plurality of samples, and then "clustering" signals with similar time-of-flights, mass-to-charge ratios, or values derived from time-of-flights or mass-to-charge ratios. Paragraph [0033] only discusses how a TOF (time of flight) mass spectrometer works.

The above arguments were made to the Examiner during the interview. As noted in the interview summary dated February 9, 2005, the Examiner agreed to withdraw the rejection based on Karger et al. in view of Applicants' arguments. Accordingly, Applicants request that the anticipation rejection based on Karger et al. be withdrawn.

II. 35 USC § 103

Claims 49 and 61 are rejected over Karger et al. and Nelson et al. (U.S. Patent Application Publication No. 2001/0034450). In the Office Action, the Examiner states that Karger et al. "discloses a method and computer medium, except detecting class by disease." The Examiner states that Nelson et al. is cited as "disclosing detecting class by disease ... in order to detect any [antigens] or antibodies in a specimen ..." This rejection is traversed.

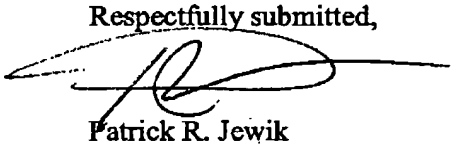
Applicants respectfully submit that Nelson et al. fails to remedy the deficiencies of Karger et al. and dependent claims 49 and 61 are allowable because they depend from allowable independent claims.

Nelson et al. fails to show several elements lacking in Karger et al. For example, like Karger et al., Nelson et al. fails to teach or suggest a method for analyzing mass spectra, where the method comprises detecting signals including signal intensities in a plurality of spectra derived, for example, from a plurality of samples, and then "clustering" signals with similar time-of-flights, mass-to-charge ratios, or values derived from time-of-flights or mass-to-charge ratios. Nelson et al. is directed to rapid mass spectrometric immunoassay methods for detecting and/or quantifying antibody and antigen analytes utilizing affinity capture to isolate analytes and internal reference species. This is followed by mass spectrometric analysis of the isolated analyte/internal reference species. Like Karger et al., Nelson et al. is generally directed to mass spectrometry methods and is not concerned with analyzing mass spectra after they are created.

CONCLUSION

In view of the foregoing, Applicants believe that the claims are in condition for allowance. If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,



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